



## **SUBSITUTE ABSTRACT**

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A cis-acting nucleotide sequence which is capable of rendering the removal of intron/s from a precursor transcript encoded by a gene, which gene harbors at least one such cis-acting nucleotide sequence, occurring during the production of mRNA of said gene, dependent upon activation of a trans-acting factor. The trans-acting factor is an RNA-activated protein kinase which is capable of phosphorylating the  $\alpha$ -subunit of eukaryotic initiation factor 2, or the RNA-activated protein kinase (PKR). The cis-acting nucleotide sequence can be derived from the 3' untranslated region of the human tumor necrosis factor α gene (TNF-α 3'-UTR). The cis-acting nucleotide sequence may comprise the nucleotide sequence as denoted by SEQ ID NO:1; or biologically functional fragments, derivatives, mutants and homologues of the nucleotide sequence as denoted by SEQ ID NO:1; or a nucleotide sequence whose complementary nucleotide sequence hybridizes, under conditions which allow for such hybridization to occur, with the nucleotide sequences as denoted by SEQ ID NO:1 or biologically functional fragments, derivatives, mutants and homologues of the nucleotide sequence as denoted by SEQ ID NO:1.